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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/526,143	02/28/2005	Grant Stuart Richardson	41577/312175	2535
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JOHN S. PRATT, ESQ KILPATRICK STOCKTON, LLP 1100 PEACHTREE STREET SUITE 2800 ATLANTA, GA 30309			EXAMINER DIXON, ANNETTE FREDRICKA	
			ART UNIT 3771	PAPER NUMBER
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/526,143

**Applicant(s)**

RICHARDSON ET AL.

**Examiner**

Annette F. Dixon

**Art Unit**

3771

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 May 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-12 and 14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-8508)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This Office Action is in response to the request for continued examination filed on May 20, 2009. Examiner acknowledges claims 1-12, and 14 are pending in this application, with claims 1, 8, and 12 having been currently amended, and claim 13 having been cancelled.

#### ***Continued Examination Under 37 CFR 1.114***

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on May 20, 2009 has been entered.

#### ***Claim Objections***

3. Claim 1 is objected to because of the following informalities: On line 13, the word "pressurized" is misspelled "pressurised". Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 112***

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

5. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. No amendment may introduce new matter into the disclosure of an application after its filing date. MPEP §608.04.

Specifically, claim 1 now recites the claim limitation "wherein the first and second cavities define separate, non communicating cavities"; however, the originally filed disclosure does not provide evidence that Applicant possessed the newly claimed invention at the time the application was filed. In fact, the original specification of the instant invention discloses "in use" the engagement of the first and second cavities to be separate; however, upon the mask being removed from the face these cavities would in fact communicate with each other as the sealing structure about the face of the user has been removed. There is no specific support or recitation for the respirator of instant claims being able to define separate and non communicating cavities as claim away from the user's face; and therefore, the subject matter of the added to claim 1 is considered to be new matter and must be cancelled from the claims. Dependant claims 2-7 incorporates this non supported subject matter recited in the claims from which they depend. In re Jonson, 558 F.2d 1008, 1019, 194 USPQ 187, 196 (CCPA 1977); Ex parte Grasselli, 231 USPQ 393 (Bd. App. 1983), aff'd mem., 738 F.2d 453 (Fed. Cir. 1984); and Ex parte Parks, 30 USPQ2d 1234, 1236 (Bd. Pat. App. & Inter. 1993).

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Warncke et al. (4,146,025).

As to Claim 1, Warncke discloses a respirator (Figure 1) comprising a respirator face piece (1), a first sealing means (3) configured to form a seal on the face of a user surrounding an area of the user's face comprising the eyes, mouth, and nose so as to define a first cavity bounded by the first sealing means (3), the respirator face piece (1), and said area of the user's face, a second sealing means (10) for forming a seal on the face of the user that forms an outer seal around the first sealing means (3) so as to define a second cavity, the second cavity being formed between the second sealing means (10), the first sealing means (3), and a portion of the face of the user, and optionally the respirator face piece (1) (note the connection at rubber ring, 13), where in the first and second cavities define separate, non-communicating cavities (Column 3, Lines 57-61), a respirator air inlet (14) for conducting inhalation air to the first cavity, a respirator air outlet (9) for conducting exhaled air from the first cavity, and an air pressure supply means (16) suitable for supplying pressurized air to the second cavity in order to maintain positive pressure in the second cavity; whereby in normal operation air is inhaled (via 14) and exhaled (via 9) solely through the first cavity and substantially no air pressure differential exists between the ambient atmosphere and the second

cavity which will allow ambient air to enter the second cavity. Regarding the formation of the second sealing means on the face of the user, as seen in Figure 1, the second sealing means (10) surround the head of the user (30) and is connected to the face on the neck by cuff (15). This engagement of the second sealing means about the face of the user produces a sealed cavity by which a seal is formed on the face of the user. Further, prior to inflation of the sealing means (10) by the gas (16), the second sealing means (10) may contact portion of the user's face as the second sealing means (10) is pliable and bag-like. (Column 3, Lines 30-35). Regarding the positive pressure limitation, the purpose of the device of Warncke is to test the tightness of the gas mask in order to detect leakage, in the advent that the first cavity seal is improper, gas from the positive pressure provided in the second cavity will seep into the first cavity and appear in the measuring bag (18). (Abstract, and Column 4, Lines 14-26). Inherently, the air supply means (16) supplies positive pressure to the second cavity. Regarding the pressure differential limitation upon normal operation, if the respirator face piece is properly operating there will be no connection between the first and second cavities; further, the seal (15) between the second cavity and the ambient air will not be broken as the seal (15) is tightly engaged.

As to Claims 2-5, Warncke discloses at least one eyepiece (4), and a means for directing inhaled air over the at least one eyepiece (4). Regarding the means for directing inhaled air over the eyepiece (4), Warncke disclose the inner mask portion (2) which separates the air inlet passage (2b) and the respiratory air passage (2a). With respect to claim 3, the shape of the means for directing inhaled air (2) has a curved

shaped, as seen in Figure 1, which would not preclude some air from being deflected about the liner and directly to the user's mouth. With respect to claim 4, the shape of the means for directing inhaled air (2) provided an engaged region about the nose and mouth of the user. This structure along with the pressure differential between the provided inlet air and the exhaled air from the user would work to direct the exhaled air to be excised from the mask through the exhalation valve (9). With respect to the claim 5, the seal is defined by the connection of the means for directing inhaled air (2) to the nose and mouth of the user. The instant claims do not prohibit the passage of gas between the first and the third sealing means.

8. Claims 8-10 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Cronjaeger (4,905,683).

As to Claims 8 and 12, Cronjaeger disclose a face piece (Figures 1 and 2); and a sealing piece comprising: first (6), second (11), and third (2) portions, each of the first (6) and the second (11) portions comprising a substantially compliant material and having a respective sealing surface suitable for engagement with the face of the user to define a substantially sealed cavity (4) bounded by the sealing piece and the face of the user, the first (6) and second (11) portions being mutually connected (along the construction of the mask Figures 1 and 2) by and contacting a third portion (2, see engagement of the third seal 2 at the chin of the user) for attachment to the surface of the respirator, the sealing piece further comprising a gas inlet (16) for allowing, in use, the supply of pressurized gas to the cavity (4, via valve 9), and wherein the first (6) and

the second (11) portions are shaped having end portions that are inwardly curved toward one another such that, in use the application of positive pressure in the cavity does not cause the seals to be broken. Regarding the shape, as seen in Figures 1 and 2, the first sealing means (6) curves upwardly towards the forehead of the user, while the second sealing means (11) curves downwardly from the brow to the forehead. Inherently these curvatures meet the limitations of inwardly curved toward one another.

As to Claim 9, Cronjaeger discloses the application of positive pressure by the opening of valve (9) into the cavity (4) enables a tight seal about the first (6) and second (11) sealing means. (Column 4, Lines 42-50).

As to Claim 10, Cronjaeger discloses the shape of the sealing piece around the face of the user to ensure a seal (Figure 2); yet does not expressly disclose the shape of the first and second portions to be "J" or "U" shaped. As seen in Figure 2, a portion of the first seal (6) near the chin of the user is constructed in a "J" shape, and a portion of the second seal (11) near the neck of the user is constructed in a "U" shape.

### ***Claim Rejections - 35 USC § 103***

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Warncke et al. (4,146,025) in view of Beaussant (4,741,332).



As to Claim 7, Warncke discloses the respirator air inlet (14) is, in use, in gaseous communication with the first cavity, thus forming a first gaseous pathway (represented by the flow from gas from 14 to 2b to 2a to valve 9), a second air inlet (17) is in gaseous communication with the air pressure supply means (16) which is capable, in use, of providing gas to the second cavity, thus forming a second gaseous passageway. Yet Warncke does not expressly disclose the first (14) and the second (17) inlets are located in common filter connection means for gaseous supply. Beaussant teaches a mutually isolated first and second pathways (22 and 20) wherein the gas enters at a common filters (38 and 40) for the purpose of removing the contaminates from the ambient environment (Figure 1 and Column 2, Lines 59-67). Therefore, it would have been obvious to one having ordinary skill in the art to modify the gas delivery system of Warnke to supply a common gas source to the first and second cavities through the first and second inlets as taught by Beaussant to prevent chemical, bacteriological and/or radioactive contaminates from entering the gaseous pathway of the wearer.

11. Claims 11, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cronjaeger (4,905,683).

As to Claims 11 and 14, Cronjaeger discloses the sealing piece, yet does not expressly disclose the first and second portions comprise a reverse reflex seal. However, the ability of the seals to reverse reflex is a function of the flexibility of the material. Therefore, it would have been obvious to one having ordinary skill in the art at

the time the invention was made to change the material of the sealing piece's flexibility, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416.

### ***Double Patenting***

12. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

13. Claims 1 and 6 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 7,523,755.

Although the conflicting claims are not identical, they are not patentably distinct from each other because patent claim 1 is merely broader than instant claims 1 and 6. It is clear that all of the elements of claim 1 of the patent are located in claims 1 and 6 of the

instant application. The difference lies in the fact that the instant claims include many more elements and is thus much more specific. Thus, the invention of the instant claims 1 and 6 are in effect a "species" of the "generic" invention of the patent claim 1. It has been held that the generic invention is "anticipated" by the species. See *In Re Goodman*, 29 USPQ2d 2010 (Fed. Cir. 1993). Since claim 1 of the patent is anticipated by claims 1 and 6 of the instant application, it is not patentably distinct from the instant claims 1 and 6.

With respect to all the claims, each recites a valve assembly comprising elements including a purge outlet, an air deflection means, a valve inlet, and a valve outlet where the air deflection means has a curtain of air; yet, the instant application provides additional particulars to the features of the respirator used with the associated valve assembly.

### ***Response to Arguments***

14. Applicant's arguments with respect to claims 1-12 and 14 have been considered but are moot in view of the new ground(s) of rejection. With respect to the prior art rejection of claims 8-12 and 14 over Cronjaeger (4,905,683) it is noted the particulars of the first and second sealing pieces as claimed in independent claim 1 are not recited in independent claims 8 and 12, thus the Cronjaeger prior art reference has been revisited to meet the claim limitations.

### ***Conclusion***

15. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Miller (3,659,611) discloses a multiple sealing structure wherein the flexibility of the sealing structure enables the seals to be bent in a plurality of directions. Beizntsson et al. (6,837,239), Warncke (4,403,608), and Pasternack (4,253,328) discloses additional breathing devices having a full face mask and a secondary hood system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Annette F. Dixon whose telephone number is (571) 272-3392. The examiner can normally be reached on Monday thru Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Justine Yu can be reached on (571) 272-4835. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Annette F Dixon  
Examiner  
Art Unit 3771

/Annette F Dixon/  
Examiner, Art Unit 3771

/Justine R Yu/  
Supervisory Patent Examiner, Art Unit 3771